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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,927	10/10/2000	Hideki Usuki	DAIN: 563	2321
7590 02/13/2004 PARKHURST & WENDEL, L.L.P. 1421 Prince Street, Suite 210 Alexandria, VA 22314-2805			EXAMINER XU, LING X	
			ART UNIT	PAPER NUMBER

1775

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/684,927

Applicant(s)

USUKI ET AL.

Examiner

Ling X. Xu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. It should be noted that applicant indicated in the Request for Continued Examination (RCE) under 37 CFR 1.114 filed on 12/11/2003 that the amendment filed on 9/22/2003 has not been entered. The Examiner disagrees. The amendment filed on 9/22/2003 had been entered in the Advisory Action dated 10/16/2003, see item 7 of the Advisory Action. The Examiner also had considered the Declaration under CFR 1.132 filed with the amendment of 9/22/2003, see item 5 of the Advisory Action.

Therefore, since all claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, THIS ACTION IS MADE FINAL even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Claim Rejections - 35 USC 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 4-9 stand rejected under 35 U.S.C. 103(a) as obvious over Oshima et al. (US 5,427,997) in view of Kanto et al. (US 5,134,112).

Oshima discloses that a heat transfer sheet comprises (See Fig. 1):

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- a release layer made of acrylic resin (Col. 5, lines 45-55);
- a transparent resin layer made of resins such as polyester, acrylic, epoxy resins (Col. 4, lines 45-55);
- an adhesive layer made of polyester resins;
- a substrate film;
- a back layer (Col. 4, lines 20-25) or a heat-resistant slip layer (Col. 21, lines 25-32).

Oshima also discloses that the release layer is not transferable and the resin layer is releasable from the substrate film (Col. 2, lines 10-20).

Oshima does not disclose that the adhesive layer contains microsilica in the range of 3-10%.

Kanto teaches by incorporating fine particles into the adhesive layer can reduce the coefficient of friction of its surface (Col. 6, lines 10-20). Examples of fine particles are silica (microsilica, because the thickness of the adhesive layer is on the order of a few μm) (Col. 4, lines 12-20).

Kanto also teaches that the addition of such inorganic fine particles in the range of 0.01 to 10% by weight makes it possible to reduce the coefficient of friction of the surface of the adhesive layer (Col 4, lines 12-20).

Therefore, it would have been obvious to one of ordinary skill in the art to add microsilica in the range of 0.01 to 10% into the adhesive layer of Oshima in order to reduce the coefficient of friction of the surface of the adhesive layer, as taught by Kanto.

The combination of Oshima and Kanto teaches incorporating microsilica in the range of 0.01 to 10%, which includes the claimed range of 0.3-10%, in the adhesive layer.

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As disclosed in the specification, the incorporation of microsilica into the protective layer can satisfy a requirement such that the coefficient of friction between the surface of the protective layer and the surface of the image-receiving sheet before thermal transfer is 0.05 to 0.5 in terms of μ_0 and μ with the value of μ_0/μ being 1.0 to 1.5. Accordingly, the adhesive layer added microsilica in the range of 0.01 to 10% as taught by Oshima and Kanto will also have the same properties as claimed, such as the coefficient of friction values.

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Response to Arguments

3. Applicant's arguments filed 12/11/2003 have been fully considered but they are not persuasive.

Applicant argues that the OD values in Table 2 of the Declaration at the step 14 and step 15 levels shows significant difference between the 0 to 3% microsilica content and the 12 to 20% microsilica content. The Examiner disagrees.

Table 2 of the Declaration shows the difference in the OD values between 0% and 3% microsilica content and 12% and 20% microsilica content but does not show the OD values of

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the range of 0.01% to 10% microsilica content which is disclosed by Kanto as indicated above and the final Office action dated 6/18/2003. The Declaration fails to provide unexpected data between the range of 0.01% to 3%, which is included in Kanto and outside of the claimed range of 3 to 10%. The OD values of 12% and 20% microsilica content is irrelevant to the disclosure of the cited prior art and the present claimed invention since neither of them recite microsilica content being at this range.

Accordingly, the Declaration under 37 CFR 1.132 filed 9/22/2003 is insufficient to overcome the rejection of claims 1 and 4-9 based upon 35 USC 103(a) as set forth in the last final Office action dated 6/18/2003.

Conclusion

4. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling X. Xu whose telephone number is 571-272-1546. The examiner can normally be reached on 8:00 - 4:30 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah D. Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Ling X. Xu
Examiner
Art Unit 1775

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LX


DEBORAH JONES
SUPERVISORY PATENT EXAMINER